School District Review Program Issued August 2015 **TIGERweb Map Viewer for Review of School Districts**



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School District Review Program TIGERweb Map Viewer for Review of School Districts

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Purpose

The U.S. Census Bureau is providing its TIGERweb online map viewer as an option for state and local education officials participating in the School District Review Program (SDRP) to review the Census Bureau's 2013-2014 school district information and to provide updates and corrections to the school district names, Federal Local Education Agency identification numbers (LEA), boundaries, and the grade ranges for which a school district is financially responsible. TIGERweb allows viewing, at street level detail, features such as roads, waterways, county, place, city, and school district boundaries.

You can use the TIGERweb map viewer http://tigerweb.geo.census.gov/tigerweb/ to locate a school district and compare it to a local source for school districts to determine if you need to make boundary changes. You may provide boundary changes to the SDRP if the map does not correctly depict the school district boundary in effect as of January 1st, 2016. More information about the SDRP is available from the Census Bureau's SDRP website http://www.census.gov/geo/partnerships/sdrp.html.

To review the boundary of a school district you will need either the name of the school district or the seven-digit **GEOID** numeric code for the school district. You will find the GEOID in the School District Inventory and Grade Range File (SD_Inventory.xls) located on the 2015-2016 SDRP Data disc. The GEOID is comprised of the two-digit FIPS State code for the state in which the school district is located followed by the five-digit Federal school district LEA code assigned to the school district. TIGERweb will use the GEOID to zoom directly to the school district.

If you are a state SDRP mapping coordinator, we ask that you please provide local education officials with these instructions, which can be downloaded from the 2015-2016 SDRP website under the <u>Annotation Phase Program Materials</u> hyperlink.

If you are a local education official, and determine that you have changes to report for the 2015-2016 SDRP, you will report the changes to your state SDRP mapping coordinator who will submit your changes to the Census Bureau. The SDRP Mapping Coordinator is the liaison between your state department of education and the Census Bureau. You can find contact information for your state's mapping coordinator on the SDRP website http://www.census.gov/geo/partnerships/sdrp.html under the Contact Information hyperlink. You can print paper maps or capture screen images of the areas where boundaries require update; you can annotate your changes; and forward them to your state SDRP mapping coordinator for update and submission to the Census Bureau.

The Census Bureau will not accept school district boundary changes:

- a. Submitted directly to the Census Bureau by local education officials
- b. Annotated on maps printed using the TIGERweb map viewer.

¹ Federal Information Processing Standards

² Local Education Agency

Getting Started with TIGERweb

TIGERweb Applications

TIGERweb

Contains:

- Current (BAS 2015)
- ACS 2014
- ACS 2013
- 2010 Census (adjusted boundaries)
- Current (BAS 2015) Physical Features

TIGERweb Decennial

Contains:

- 2010 Census
- Census 2000 (adjusted boundaries)
- 2010 Census Physical Features

Legend

TIGERweb User Guide

Note: These links will open new browser windows.

The applications need:

- JavaScript enabled
- Allow Popups

Go to the TIGERweb Applications page http://tigerweb.geo.census.gov/.

TIGERweb currently supports Microsoft Internet Explorer, Mozilla Firefox, Opera, and Google Chrome internet browsers.

Click on the **TIGERweb** link under TIGERweb Applications tab on the left side of the screen. Do not click on the **TIGERweb Decennial** link. The **TIGERweb** link includes 2014 American Community Survey (ACS) data that contains school district updates submitted during 2013-2014 SDRP.

TIGERweb contains the geographic school district boundary updates for your state school districts submitted during the 2013-2014 SDRP which we want you to review.

The TIGERweb application offers the ability to view:

- Roads, highways, and railroads
- Rivers, lakes, streams and other "single-line" drainage
- Boundaries for legal and statistical geographic entities
- Selected special land use areas such as military reservations and national parks
- Satellite imagery

Figure 1: Select TIGERweb from the TIGERweb Applications tab.

After opening **TIGERweb**, you will see the map display and navigation tools, layers panel, and map vintage.



Figure 4: TIGERweb Opening screen with Map Layers panel

Available Map Layers

The Layers panel shows the list of available features and geographic areas. Labels, Hydrography, States, and Counties are displayed by default at startup. The layers are organized into separate groups, called map services, based on geographic type. You will have to expand each map service by clicking on the "+" symbol to see all of the available layers that include physical features such as roads and water features, as well as legal and statistical boundaries, such as census blocks and incorporated places. You can limit the amount of data on the map by selecting only the types of linear features and geographic entities you want to see. Click on the "+" sign to expand a map layer and view the 'Slider' tool to make the layer more or less transparent.

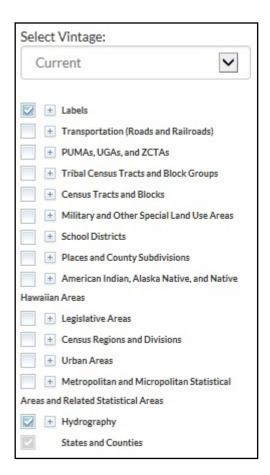


Figure 3: Layers panel

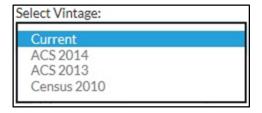


Figure 4: Vintage selection box

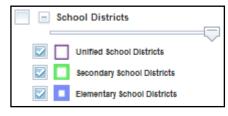


Figure 5: Layers Slider tool to make layer more or less transparent.

Selecting a Map Layer

The 'Select Vintage' dropdown in the Layers panel shows the vintages of TIGERweb geography that are available for display in the application. Select **Current**, if not already selected, to view the geographic updates for your entity submitted during the 2015-2016 SDRP. Click on the '+' sign next to each map service in the Layers panel to expand the map service and view the layers within it. Click on the small boxes (check/uncheck) to select the Transportation, Places and County Subdivisions, and School Districts map layers.

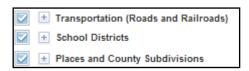


Figure 6: The Transportation, Places, and School District layers are selected.

Move Around/Zoom In/Zoom Out of Map Display

You will notice the features and geographic areas contained in the map services do not immediately appear. This is because each layer has a range of zoom levels at which it will display. In other words, visibility is scale dependent. As you zoom in on the map, more details will appear.

You can use the 'Zoom In' scrollbar tool located on the vertical Scale Bar to zoom in to see more detail on the map or zoom out to see less detail. Click on the "+" to zoom in for more detail or click on the "-" to zoom out for less detail. You can also zoom in or out using by rolling the wheel on your computer mouse.

At Zoom level 6, counties appear; at Zoom level 7, school districts begin to appear; at Zoom level 9, Places appear; and at Zoom level 10, Roads and Railroads appear. The current Zoom level is shown on the scale bar in the lower left of the Map display.

Zoom: 8	40km
1:2,311,162	30mi

TIGERweb Symbology

Click on the 'Legend' tool at the top of the screen to view the symbology used for each layer.



If the layer you selected does not appear in the legend, zoom in on the map for the feature to appear on the map and on the legend. Click on 'Detailed Legend' to see at what zoom level the layers and labels appear.

If you want to see boundaries for only some types of place and county subdivision features, you can turn them off or on by clicking on the appropriate item in the Layers panel.

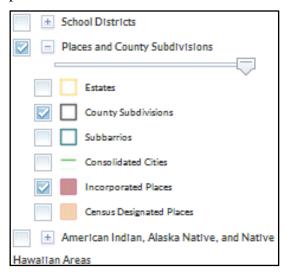


Figure 7: Check-boxed map layers are selected for display.

As you zoom into the map, more detail will appear. You can select the Transportation Map Service to display road and rail features to help recognize local areas.

Locating Your School District

TIGERweb allows SDRP participants to quickly locate an entity visually using the 'Zoom In' tool or by using the 'Query' tool to search for a school district by its name or unique GEOID. The seven-digit numeric GEOID code is listed on the School District Inventory and Grade Range Listing (SD_Inventory.xls) located on the 2015-2016 SDRP Data disc. The GEOID is comprised of the two-digit FIPS State code followed by the five-digit Federal LEA code assigned to the school district. Type the seven-digit GEOID

in the "Enter GEOID of Feature" box. You can also search for a school district by typing its name in the 'Enter Name of Feature' box. *Enter a GEOID or a Name; but not both.*



Select the 'Query' Tool from the toolbar. Select the 'Attribute' Tab. From the 'Select Map' dropdown, select one of the following map services:

States and Counties to locate a county

Places and County Subdivisions to locate a city or town School Districts to locate a Unified, Secondary, or Elementary school district



Figure 8: Query tool.

Use the Query examples shown below to locate your own entity. Searching by unique GEOID will take you directly to your entity. Searching by Name could produce a list of school districts with the same.

Example for locating a Unified School District, using West Prairie Community Unit School District 103, Illinois - GEOID 1700314.

- 1. Select the 'Query' tool.
- 2. From the 'Select Map' dropdown, select School Districts.
- 3. From the 'Select Layer(s)' dropdown, select Unified School Districts.
- 4. Enter the GEOID for the school district in the 'GEOID' field.
- 5. Click 'SUBMIT' to search for the unified school district.

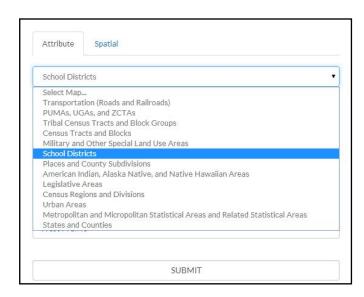


Figure 9: Using Query tool to locate a School District by its unique GEOID. **Select Map – School Districts**.

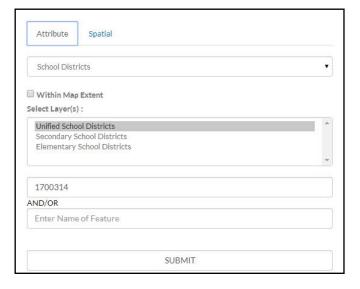


Figure 10: Using Query tool to locate a School District by its unique GEOID. Select Layer - School Districts. Enter GEOID.

TIGERweb displays the result(s) of the query under the 'Query Results' tab to the left of the map. TIGERweb also displays the 'Info' panel containing attribute data for the entity. Minimize or close the 'Info' panel by clicking on the '-' or 'x' symbols in the top right of the 'Info' panel.

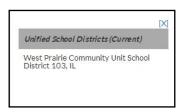
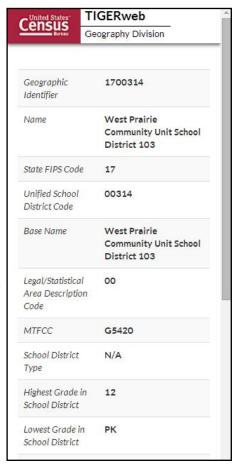


Figure 11: Query found West Prairie Community Unit School District 103, Illinois, using its unique sevendigit GEOID.

Figure 12: TIGERweb Info panel with attribute data for West Prairie Community Unit School District 103.



Click on the name of the result listed under the 'Unified School Districts' heading of Query Result(s) and TIGERweb will display the school district highlighted in the center of the map display.

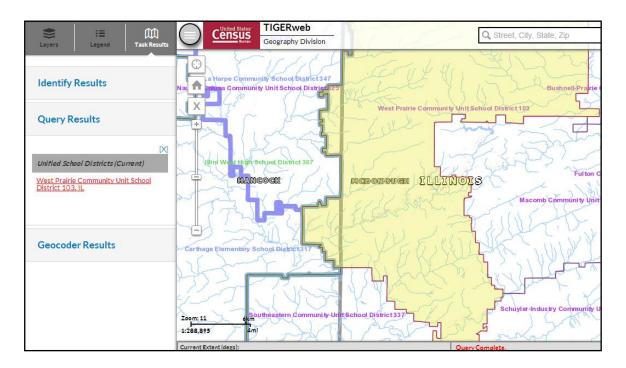


Figure 13: Query Result West Prairie Community Unit School District 103, Illinois, highlighted in center of map display.

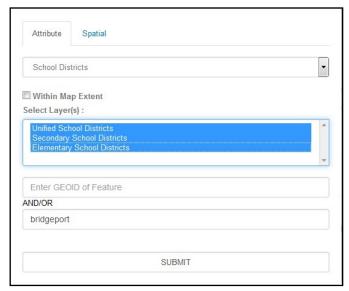


To start a new Query, click 'Clear Map' on the navigation toolbar above the 'Zoom-In' scrollbar. The Query window reappears and the located entity is no longer highlighted.

Example for locating a school district named Bridgeport in Connecticut without knowing its school district level.

- 1. Select the 'Query' tool.
- 2. From the 'Select Map' dropdown, select School Districts.
- 3. From the 'Select Layer(s) dropdown, hold down the Control or Shift Key and click on Unified, Secondary, and Elementary. All three will display as highlighted.
- 4. Enter the name Bridgeport in the Name of Feature field.
- 5. Click 'SUBMIT' to search.

Searching by name could produce a list of school districts with the same or similar names. The Query result will include the state in which the entity is located.



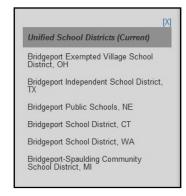


Figure 15: Query by Name produces multiple results.

Figure 14: Query by Name could produce multiple results.

TIGERweb displays the selected entity highlighted in the center of the map display, along with the 'Info' panel containing attribute data for the entity. Minimize or close the 'Info' panel to view the entire map and Query Result(s) box.

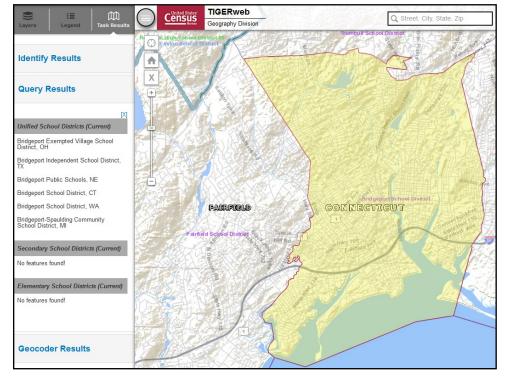


Figure 16: Bridgeport School District in Connecticut located using its name.

You can view additional layers such as Transportation and Places by clicking the small boxes next to the map services in the Layers panel. You can use the same action to de-select layers you no longer want to view.

You can search for other entities as well in TIGERweb.

Example for locating the City of Sweetwater, Tennessee (Incorporated Place).

- 1. Select the 'Query' tool.
- 2. From the 'Select Map' dropdown, select Places and County Subdivisions.
- 3. From the 'Select Layer(s)' dropdown, select Incorporated Places.
- 4. Enter the GEOID for your Incorporated Place in the GEOID field.
- 5. Click 'SUBMIT' to search for your Incorporated Place.

TIGERweb displays the located entity highlighted in the center of the map display, along with the 'Info' panel containing attribute data for the entity. Minimize or close the 'Info' panel to view the entire map and Query Result(s) box.

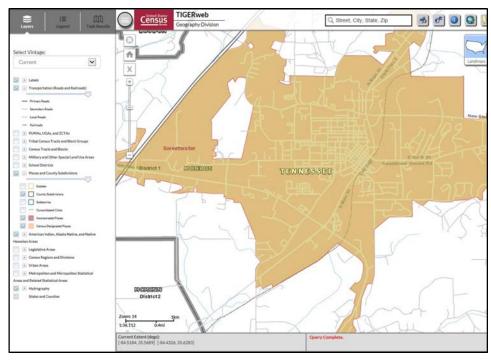


Figure 17: Sweetwater Incorporated Place located using its GEOID.

Identify Tool

You can identify features on the map by using the 'Identify' tool. Click on the 'Identify' tool at the top of the screen and click on the area of the map or feature you want to identify. In the 'Identify Results' panel you can click on any of the features to get attribute information about the area or feature. When you click on a feature, its area on the map is highlighted. The 'Identify' tool shows attribute information only for visible layers (checked in the Layer dropdown).

Example using the 'Identify' tool to get Attribute data for the Fairfield School District adjacent to the Bridgeport School District.

To get Attribute data for the Fairfield School District, click on the 'Identify' tool on the toolbar (cursor changes from a pointer to crosshairs "+") and click inside the boundary of Fairfield School District. Identify Tool returns information on all entities selected in the Map Layers panel. Click on an entity in the Identify Results list to get more information. Clicking on Fairfield School District displays the Info panel and attributes about the school district including grade range, and land and water area.

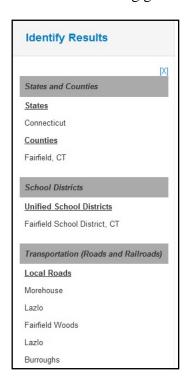


Figure 18: Identify Results list all entities in the area selected.

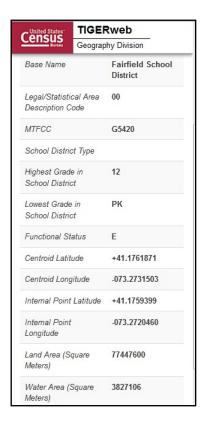


Figure 19: Attribute info is displayed,

Changing Transparency

When multiple layers are displayed, one layer may obscure another layer. You can change the transparency of each layer by moving the sliding bar below the layer name to the left or right.



Figure 20: Move Layers panel slider to change transparency of a layer.

Viewing Satellite Imagery for Your Entity

TIGERweb allows the user to select landmass, satellite imagery, or terrain as the background for the map display. Landmass displays by default when you open TIGERweb. After you locate and zoom into your entity, click on the Topography button (upper right corner of the Map Display) until the 'Satellite' icon appears



and imagery overlays your entity. This dual view allows you to see the relationship between the location of a boundary in our file to the location of real-world features such as roads and property lines.

Figure 21: Use the Topography Button to display satellite Imagery.

Reviewing and Reporting your school district boundaries

After you use the TIGERweb Query Tool to locate your school district, you can compare the TIGERweb map of your school district to a local source for your school district boundary.

You can use the TIGERweb Terrain Tool to view satellite imagery for your school district as well as the entire country. Click on the Terrain Tool at the top of the screen then click on the Imagery icon to overlay your school district with satellite imagery.





Figure 22: Viewing satellite imagery using the TIGERweb Terrain Tool.

This dual view allows you to see the relationship between the location of a boundary in our file to the location of real-world features such as roads and property lines.

You need to provide boundary update information to your state mapping coordinator if the TIGERweb map does not correctly depict the school district boundary shown in your local source.

If you are a local education official, and determine that you have changes to report for the SDRP you will report the changes to your state mapping coordinator who will submit your changes to the Census Bureau. You can find contact information for your state mapping coordinator on the SDRP website at:

http://www.census.gov/geo/partnerships/sdrp.html.

Printing a map

After using TIGERweb to review your school district boundary, you can use the application to print paper maps or capture screen images of the areas where your boundary needs to be updated, annotate your changes, and forward them to your state mapping coordinator.



Figure 23: Print a section of boundary, mark changes, and submit to mapping coordinator.

The Census Bureau will not accept boundary changes for the SDRP submitted directly to the Census Bureau annotated on maps printed using the TIGERweb map viewer.

If you are a state mapping coordinator, we ask that you provide local education officials with these instructions, which can be obtained from the SDRP website: http://www.census.gov/geo/partnerships/sdrp.html under the Annotation Program Materials hyperlink.

For further information about the SDRP, visit our website: http://www.census.gov/geo/partnerships/sdrp.html.